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| 10/776,522   | 02/12/2004  | Yohei Makuta         | 0505-1268P                       | 4129                        |
| 2292 7590 11/05/2007<br>BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |             |                      | EXAMINER<br>GEBREMICHAEL, BRUK A |                             |
|  |             |                      | ART UNIT<br>4138                 | PAPER NUMBER                |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/776,522

Applicant(s)

MAKUTA, YOHEI

Examiner

Bruk A. Gebremichael

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The following is a Final Office Action in response to communications received on September 19, 2007. Claim 15 has been canceled. Claims 1, 10-12 and 17 have been amended, and claims 18-21 have been added.

#### ***Response to Amendment.***

2. Applicant's amendment to claim 15 is sufficient to overcome the objection set forth in the previous office action.

#### ***Claim Objections***

3. Claim 16 is objected to because it depends on a claim that has already been cancelled. For this reason, claim 16 is withdrawn from consideration.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, 9, 10, 12, 13, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605.

Regarding claim 1, Caprai discloses, a display for displaying scenery viewable to the operator as a video image on the display, wherein the video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (see FIG 1), a steering handle mechanism capable of.

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being gripped by the operator (FIG 3, label 56), a body for rotatably securing the steering handle mechanism (FIG 3, label 16) and a control unit (FIG 1, label 14).

However, Caprai fails to disclose the following claimed limitations: a pair of left and right main frames and a centrally located main frame for rotatably securing the steering handle mechanism, and a control unit for the system being mounted between the pair of left and right main frames and under the centrally located main frame.

Ritchie teaches, a pair of left and right main frames and a centrally located main frame for rotatably securing the steering handle mechanism, and a control unit (FIG 1, label 3) for the system being mounted between the pair of left and right main frames and under the centrally located main frame (see FIG A below with the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie in order to achieve a more realistic riding experience, as taught by Ritchie (See FIG 1).

Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses:

Regarding claim 3, a clutch lever and a brake lever (FIG 3, labels 72 and 76).

Regarding claim 4, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5).

Regarding claim 6, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56) and includes a throttle grip (FIG 3, label 68 and col.6, lines 65-67) for an accelerating operation of the motorcycle displayed on the display.

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Regarding claim 9, the display being a display for a personal computer (see FIG 1).

Regarding claim 10, a casing being formed in a substantially box shape (see FIG 1, label 14).

However, with regard to claim 10, Caprai fails to positively disclose, a circuit substrate being disposed in an interior of the casing of the control unit, and a plurality of connection cables being connected to the circuit substrate through connectors.

Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Regarding claims 12 and 13, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, the casing of the control unit is disposed between a first main frame and a second main frame (see FIG A below with the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing the control unit between a pair of main frames in order to attach the rotating member(s) of the

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control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Similarly, providing plurality of flange portions on a unit in order to attach the unit to a supporting member was an obvious and known expedient at the time of the claimed invention.

Regarding claim 17, Caprai discloses the following claimed limitations: a display for displaying scenery viewable to the operator as a video image on the display, wherein said video image is simulated based on an operating condition designated by the operator through the operation of an operating condition simulating mechanism (FIG 1), a steering handle mechanism capable of being gripped by the operator (FIG 3, label 56), a riding simulation apparatus adapted to be mounted on an elevated mounting surface (see FIG 1), a body for rotatably securing the steering handle mechanism (FIG 3, label 16) and a control unit (FIG 1, label 14)..

However, Caprai fails to disclose, a pair of left and right main frames and a centrally located main frame for rotatably securing the steering handle mechanism, and a control unit for the system being mounted between the pair of frames.

Ritchie teaches, a pair of left and right main frames and a centrally located main frame for rotatably securing said steering handle mechanism (see FIG A below with the Examiner's interpretation), and a control unit for the system being mounted between the pair of frames (FIG 1, label 3).

7/ Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie in order to achieve a more realistic riding experience, as taught by Ritchie (See FIG 1).

With regard to the limitation, *the pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and the centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface*, it has been held that as long as the function of the apparatus remains the same, rearrangement of the same parts does not change the claimed limitations. Please see the Case Law established in the *Response to Arguments*, section below.

Regarding claims 18 and 19, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a pair of sub-frames connected to roughly central portions of the right and left main frames so as to extend toward a front side of the simulation system, wherein a forward end of the centrally located main frame is connected to forward ends of the sub-frames (see FIG A below with the Examiner's interpretation).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a pair of sub-frames in order to further strengthen and stabilize the simulator, as taught by Ritchie (see FIG A below).

Regarding claims 20 and 21, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Ritchie further teaches, a cylinder portion for receiving a steering stem, and wherein each of the right, left, and centrally located main frames has an

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upper end connected to the cylindrical portion (see Appendix 1 below with the examiner's interpretation of FIG 10 of Ritchie's Patent).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by using a cylindrical member in order to rotatably secure the steering stem, as taught by Ritchie (See Appendix 1 with the Examiner's interpretation).

Claims 2, 5, 7, 8, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caprai 6,251,015 in view of Ritchie 4,637,605 and further in view of Pittarelli 3,964,564.

Regarding claim 2, Caprai in view of Ritchie teaches the claimed limitations as discussed above. Caprai further discloses, the steering handle mechanism comprising a steering stem having a generally fan-shaped upper portion (FIG 3, label 42), an elongate steering handle being integrally held on the steering stem through a holder (FIG 3, labels 56 and 54), lever joint portions through which at least one of a clutch lever (FIG 3, label 76) and a brake lever (FIG 3, label 72) are held on the steering handle, and left and right grips (FIG 3, label 60) which are mounted respectively to end portions of the steering handle.

However, Caprai in view of Ritchie fails to positively teach, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle.

Pittarelli teaches, lever joint portions through which at least one of a clutch lever and a brake lever are held on the steering handle (see FIG 1 labels 141, 142, 144 and col. 6, lines 53-55).



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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie and further in view of Pittarelli by using clamps in order to construct the joint portions in a way that the operating levers will be swingable on the handlebar as taught by Pittarelli (see FIG 1 labels 141, 142, 144 and col. 6, lines 53-55).

Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Caprai further discloses,

Regarding claim 5, a steering handle angle sensor for detecting a turning amount of a tip end portion of the stem member (col.4 lines 37-56 and FIG 5).

Regarding claims 7 and 8, the steering handle mechanism is formed in a cylindrical shape (FIG 3, label 56), and includes a throttle grip (FIG 3, label 68) for an accelerating operation of the motorcycle displayed on the display (col.6, lines 65-67).

Regarding claim 11, the control unit further including a casing being formed in a substantially box shape (FIG 1, label 14).

However, with regard to claim 11, Caprai fails to disclose, a circuit substrate being disposed in an interior of the casing, and a plurality of connection cables being connected to the circuit substrate through connectors.

Ritchie teaches, a circuit substrate (FIG 3, label 11) being disposed in an interior of the casing of a control unit (FIG 3, label 3), and a plurality of connection cables being connected to the circuit substrate through connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a

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circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

Regarding claim 14, Caprai in view of Ritchie and further in view of Pittarelli teaches the claimed limitations as discussed above. Ritchie further teaches, the circuit substrate is disposed in the interior of the casing (FIG 3, label 3), the connectors are disposed at a lower end portion of the circuit substrate, and the connection cables are connected to the circuit substrate through the connectors (FIG 3, labels 15 and 17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Caprai in view of Ritchie by placing a circuit element inside the casing in order to attach the rotating member(s) of the control unit directly with the control cables of the handlebar as taught by Ritchie (see col. 3, lines 8-15 and FIG 1 labels 3, 15 and 17).

### ***Response to Arguments.***

4. Applicant's argument filled on September 19, 2007 have been fully considered but they are not persuasive. In the remarks, Applicant argues that:

To advance the prosecution of the application, independent claims 1 and 17 are amended to recite a combination of elements directed to a riding simulation system as,

(1) Claim 1 is amended to include the limitations,

a body comprising a pair of left and right main frames and a centrally located main frame for rotatably securing said steering handle mechanism; and

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a control unit for said system being mounted between said pair of left and right main frames and under the centrally located main frame.

(2) Claim 17 is amended to include the limitations,

a body comprising a pair of left and right main frames and a centrally located main frame for rotatably securing said steering handle mechanism . . .

said riding simulation apparatus is adapted to be mounted on an elevated mounting surface, and

wherein said pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and said centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface.

By contrast, as it can be seen in Caprai FIG. 2, the document merely discloses a controller with a flat bottom surface 18 resting on a table, and a clamp 26 below the table.

However, the examiner relies on Ritchie to teach a control unit between a pair of frames, but neither Caprai nor Ritchie teaches or suggests “a body comprising a pair of left and right main frames and a centrally located main frame for rotatably securing said steering handle mechanism”, as required by each of claims 1 and 17 of the present invention.

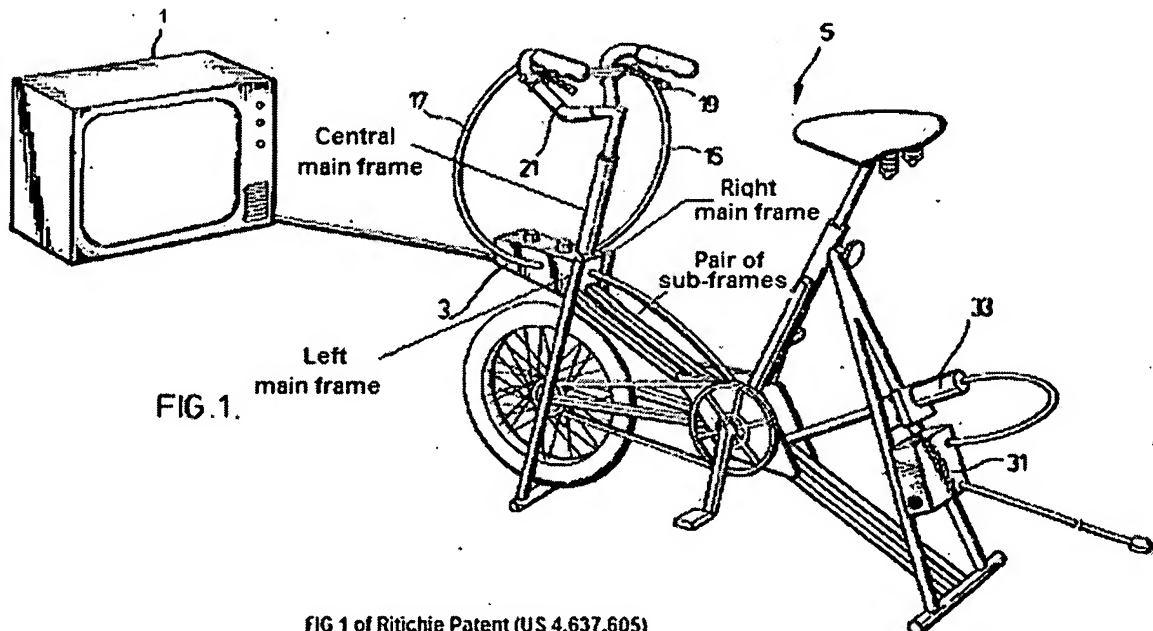
At least for this reason, the combination of elements as set in each independent claims 1 and 17 is not disclosed or made obvious by the prior art of record, including Caprai and Ritchie.

(3) Dependent claims 10-12 have been amended, dependent claim 15 has been canceled, and dependent claims 18-21 have been added. All dependent claims are in condition for

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allowance due to their dependency from allowable independent claims, or due to the additional novel features set forth therein.

In response to argument (1), Examiner respectfully disagrees. As it can clearly be seen in FIG 1 of Ritchie patent, the control unit (FIG 1, label 3) is placed between the left and right main frames. In addition, there is also a centrally located main frame, the frame on which the central back section of the control unit is attached. See FIG 10 in Appendix 1, to follow the Examiner's interpretation regarding these limitations.

**FIG. A**

Thus, by comparing the above claimed limitations with FIG A above (FIG 1 of Ritchie's Patent), the Examiner conclude that the body of the simulator of FIG 1 teaches or suggests a pair of left and right main frames and a centrally located main frame for rotatably securing the steering handle mechanism.

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With regard to the limitation, *mounting of the control unit under the centrally located main frame*, FIG 10 of Ritchie's Patent properly teaches it. Please, refer FIG 10, on Appendix 1 to follow the Examiner's interpretation.

In response to argument (2), Examiner respectfully disagrees. Regarding the limitation, riding simulation apparatus is adapted to be mounted on an elevated mounting surface, Caprai discloses, a riding simulation apparatus that is mounted on a table. (Please, see FIG 1 of Caprai's Patent).

With regard to the limitation, pair of left and right main frames is adapted to be secured to one side of the elevated mounting surface, and said centrally located main frame is adapted to be secured to an opposite side of the elevated mounting surface, it has been held that, as long as the function of the apparatus remains the same, rearrangement of the same parts does not change the claimed limitations. In re Seid , 161 F.2d 229, 73 USPQ 431 (CCPA 1947) (Claim was directed to an advertising display device comprising a bottle and a hollow member in the shape of a human figure from the waist up which was adapted to fit over and cover the neck of the bottle, wherein the hollow member and the bottle together give the impression of a human body. Appellant argued that certain limitations in the upper part of the body, including the arrangement of the arms, were not taught by the prior art. The court found that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art).

### **CONCLUSION**

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bruck A. Gebremichael** whose telephone number is (571)270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ehud Gartenburg** can be reached on (571)272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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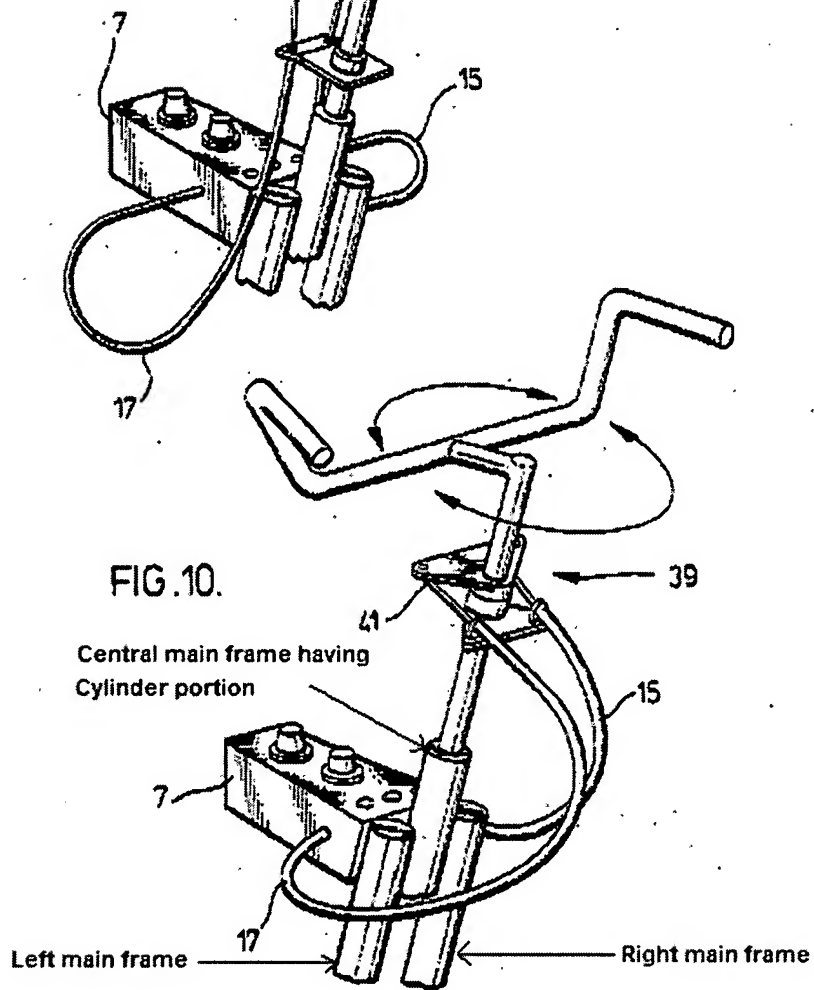
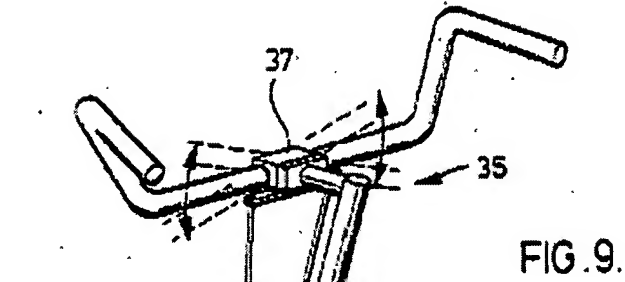
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G.B.  
05/30/07.

  
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10/31/07

# APPENDIX 1.



FIGs 9 and 10 of Ritchie Patent (US 4,637,605)